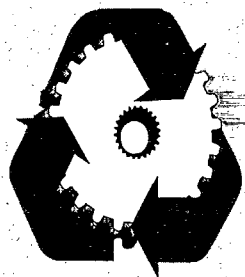


JOBS THROUGH RECYCLING



**NORTH CAROLINA
RECYCLING BUSINESS
ASSISTANCE CENTER**

United States
Environmental Protection
Agency

Solid Waste
and Emergency Response
(5306W)

EPA530-F-97-038
August 1997
<http://www.epa.gov>

JTR Grantee Series North Carolina

Prior to the 1994 Jobs Through Recycling (JTR) grant, North Carolina had a fairly sophisticated recycling infrastructure. The state was home to an active state recycling organization, many innovative recycling programs at both the state and local government level, and a growing number of recycling businesses. The North Carolina Recycling Business Assistance Center (RBAC), created in March 1995, established a mission to promote environmentally sound economic development through the reuse and remanufacture of recyclable materials. While housed in the state environmental agency, the RBAC employed one individual in the state's commerce department to foster program development. Under the JTR grant, the RBAC set a number of specific goals:

- To conduct demonstration projects in business recruitment, business expansion, feedstock conversion, and regional aggregation.
- To develop linkages with the economic development community and other market development groups in the state.
- To ensure the program's future after the 18-month term of the JTR grant.

PROGRAM ACTIVITIES

The RBAC provided assistance to local businesses in four specific areas:

Business Management

The RBAC helped companies maintain information on markets for recyclables, assess the market potential for new products, and collect recycling data for development of business plans. RBAC staff assisted several companies with the development of technologies that use recycled commodities. The RBAC also funded research efforts.

Technical Assistance

RBAC staff provided technical assistance to help businesses and local governments develop markets for recyclable materials in North Carolina. Assistance ranged from providing training and educational seminars to conducting research on specific questions. Research included marketing recyclables and increasing market efficiency, locating sources of supply for processing and manufac-



Grant Type: RBAC

Office Awarded:

Department of Environment,
Health, and Natural
Resources

Project Partners:

Department of Commerce

Year Awarded: 1994

Funding:

\$485,230 in EPA funding
\$320,613 in state funding
\$805,843 in total funding

Materials Targeted:

Paper
Plastic
Organics
Construction and demolition
(C&D) debris

Contact Information:

Mr. Matt Ewadinger, Manager
North Carolina Recycling
Business Assistance Center
P.O. Box 29569
Raleigh, NC 27626
Phone: 919 715-6500
Fax: 919 715-6794



JOBS THROUGH RECYCLING

turing operations, matching suppliers and end users through intermediary services, developing publications and materials that assess and forecast supply and demand for recyclables, and promoting partnerships and linkages for recycling market development.

Financial Assistance

In addition to awarding funding for demonstration projects, the RBAC helped recycling companies obtain financing from a variety of sources, including state economic development agencies, venture capitalists, commercial banks, and other lending institutions.

Publicity and Promotion

The RBAC encouraged the development of recycled-content products by manufacturers and promoted the "buy recycled" message to consumers. In conjunction with the North Carolina Buy Recycled Campaign, the RBAC coordinated four buy-recycled workshops and published materials highlighting facilities in North Carolina that manufacture recycled products.

CHALLENGES OVERCOME

RBAC staff overcame several challenges while implementing the grant:

- **Limited staff and resources.** To maximize its efforts, the RBAC developed an extensive network of contacts within the state. Staff learned who the experts were so they could make proper referrals. Staff also researched the types of businesses and industries located in the state and investigated available resources at universities.

- **Difficulty accessing capital for recycling entrepreneurs.** RBAC staff developed partnerships with the financial community and learned how to properly interact with economic developers (e.g., using the right "language"). These activities enabled the RBAC to assist potential recycling companies in identifying funding sources, siting efforts, and providing other support. Having one staff member located within the Department of Commerce has allowed the RBAC to build new relationships and take advantage of department resources.

**By improving recycling
market development
in North Carolina,
the RBAC and assisted
businesses achieved
significant waste
reduction, resource
conservation, and job
creation.**

- **Difficulty tracking results and progress.** RBAC staff found it difficult to measure the level of effort required for assistance. To deal with this problem, the RBAC created a tracking database to record assistance provided. A tracking form was developed and shared with other project partners so that everyone could continue to measure progress with clients.

LESSONS LEARNED

The RBAC identified the following lessons learned and advice for new grantees:

- **Set realistic goals.** Get knowledgeable people involved to establish goals that are achievable and appropriate.
- **Know who the experts are so you can make proper referrals.** Understand the types of businesses and industries located in your state as well as universities, financial institutions, and other resources. Do not expect to develop expertise in all areas of recycling business assistance.
- **Find qualified specialists.** At least one staff person should have an economic development background. Each person on staff should develop a specialty (e.g., one person focuses on financing).
- **Avoid or minimize turf issues.** A Memorandum of Understanding is a good approach to defining the roles of different organizations and clarifying responsibilities. Workshops can also help define a baseline and identify key players and organizations.
- **Understand the long-term nature of business recruitment.** Be aware it takes time to identify prospective companies and work through the recruitment and project development process.

ACCOMPLISHMENTS

During the 1994–1995 grant period, the RBAC built a productive and extensive network of contacts within the state to assist market development efforts. Staff worked to build a relationship with regulators (such as permit writers), enabling the RBAC to better

JTR GRANTEE SERIES: NORTH CAROLINA

assist business customers obtain permits and regulatory information. Further, the RBAC's efforts helped create a common bond between the state's environmental and economic development communities by emphasizing the three tenets of recycling economic development: job creation, capacity creation, and capital formation.

RBAC staff's efforts helped create a common bond between the state's environmental and economic development communities by emphasizing the three tenets of recycling economic development: job creation, capacity creation, and capital formation.

Due to the program's efforts and achievements (see results below), the RBAC is now regarded as a leader in market development, particularly in the southeast United States.

Specific accomplishments include:

- Forging a productive working relationship with Self-Help, North Carolina's community development bank. In the past 18 months, Self-Help has loaned \$1.6 million to North Carolina recycling companies.
- Training more than 130 professionals through five separate training courses and educational seminars. Courses were designed to cross-train economic development officials and recycling professionals to increase understanding of both fields.
- Awarding more than \$80,000 for recycling demonstration projects. Among these efforts, P&R Environmental Industries, a high-tech plastics processor, used RBAC funding to expand its facility by 15,000 square feet and process an additional 9,000 tons of recovered plastic bottles, creating 25 jobs with a capital investment of \$550,000. Another business will reclaim approximately 6.75 million pounds of polystyrene resin per year to make tubes for the textile industry.

PROGRAM FUTURE

The RBAC secured \$170,000 annually from the North Carolina state legislature for 5 years and a second JTR grant of \$104,000 in 1996. RBAC matching funds will be used to fund demonstration projects and contractual arrangements with commodity-specific service providers, such as the North Carolina Polymers Extension Program. The RBAC suggests that grantees look beyond state funding to private-sector or other funding sources, such as the National Institute on Standards and Technology (NIST) Manufacturing Extension Partnerships (MEPs). The RBAC has jointly hired an engineer with the North Carolina State University's MEP to target feedstock conversion opportunities in the state. The MEP secured a \$1 million grant from NIST, plus \$900,000 in matching funds from the state legislature and \$100,000 in matching funds from the RBAC.

RESULTS

Business Management:	161 businesses assisted
Technical Assistance:	382 businesses assisted
Financial Assistance:	65 businesses assisted
Full-Time Equivalents Created:	185 jobs
Amount of Capital Invested:	\$5.05 million

Volume of New Capacity Created:	
Plastics processing	14,800 tons per year
Paper manufacturing	45,000 tons per year
C&D processing	130,000 tons per year
Organics	4,000 tons per year
Tires processing	4,200 tons per year
Textiles	19,000 tons per year
Total volume of new capacity created	217,000 tons per year



JOB'S THROUGH RECYCLING

Jobs Through Recycling Success Stories

"We got where we are today because of the RBAC."

DONALD EVANS

Chairman, Waste Reduction Products Corporation

Since North Carolina has the second largest manufactured home industry in the United States, gypsum drywall scrap is one of the biggest contributors to the state's waste stream. Waste Reduction Products Corporation (WRPC) was established in October 1993 to convert this material and other sources of gypsum waste into new products for businesses and households. With RBAC assistance, WRPC has reclaimed postindustrial gypsum waste to manufacture value-added products such as spill absorbents, cat litter, and home lawn and garden supplements. After initial shipment of products in October 1997, WRPC will expand production of packaged products to 3.5 million units per year, employ up to 55 people, and reclaim more than 150,000 tons of postindustrial gypsum waste annually.



**WASTE
REDUCTION
PRODUCTS**

The RBAC provided a full range of assistance to WRPC as part of its effort to develop markets for C&D debris in North Carolina. For instance, the RBAC worked with WRPC to develop a recovery system for the collection and processing of the gypsum wallboard scrap. On the collection end, the RBAC and the North Carolina Department of Environment, Health, and Natural Resources provided a \$50,000 grant to Pitt County to facilitate recovery of gypsum wallboard scrap. The RBAC conducted a survey of the state's manufactured home industry and assisted WRPC in locating a site for its operation. To assist in manufacturing, packaging, and marketing, the RBAC provided market research, identified equipment used in the industry, and collected other market information.

The RBAC also provided financing assistance by facilitating meetings between WRPC and investors from the state and elsewhere. Investors found it helpful to have RBAC staff members meet with them and show their support for WRPC.

According to WRPC staff, the RBAC was indispensable to their research and product development efforts. Without RBAC assistance, WRPC would have spent approximately \$70,000 to \$100,000 per year on outside consulting services.

Publications

- *Recycling Works*. RBAC's quarterly newsletter has a statewide and national circulation of 3,000.
- *Assessment of the Recycling Industry and Recycling Markets in North Carolina: 1995 Update*. Provides a snapshot of the recycling and composting markets in the state in 1994 and forecasts the future supply and demand for more than 36 potentially recyclable materials.
- *Directory of Markets for Recyclable Materials*. Lists 474 North Carolina companies that collect, transport, broker, process, or remanufacture recovered materials.
- *Impact of Recycling on Jobs in North Carolina*. Documents the impact of recycling on economic development in the state.
- *Business Opportunities in Asia for the North Carolina Recycling Industry: A Market Assessment*. Provides an overview of the opportunities for North Carolina recycling companies to expand their businesses in East and Southeast Asia.
- *A Lenders' Guide to Recycling Companies*. This training guide for lenders in evaluating recycling businesses was developed by Self-Help, a local community development bank, and the RBAC.
- *Recycling as an Economic Development Strategy*. This manual was used to train economic development professionals on the recycling industry in North Carolina.